

THIS PROJECT INVOLVES THE REPLACEMENT OF EXISTING VEHICULAR SIGNAL HEADS ALONG WISTERIA DRIVE WITH LED SIGNAL HEADS, INSTALLATION OF LED SIGNAL HEADS FOR NORTHBOUND MD 118, INSTALLATION OF LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, APS PUSHBUTTONS, AND SIGNS AT THE INTERSECTION OF MD 118 (GERMANTOWN ROAD) AND WISTERIA DRIVE IN MONTGOMERY COUNTY. MD 118 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

THIS INTERSECTION CURRENTLY OPERATES IN A NEMA EIGHT-PHASE FULL-TRAFFIC-ACTUATED MODE WITH AN ALTERNATE PEDESTRIAN PHASE FOR THE NORTH AND SOUTH LEG OF THE INTERSECTION. EXCLUSIVE LEFT TURN PHASES ARE PROVIDED FOR ALL LEGS OF THE INTERSECTION.

THE EXISTING FULL-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED. IP BASED VIDEO DETECTION INTERFACE EQUIPMENT SHALL BE FURNISHED BY SHA AND INSTALLED BY MONTGOMERY COUNTY. THE EXISTING APS 2-WIRE CENTRAL CONTROL UNIT WILL BE USED.

APS WILL FUNCTION AS FOLLOWS:

TO CROSS GERMANTOWN ROAD:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS GERMANTOWN AT WISTERIA."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS WISTERIA DRIVE:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS WISTERIA AT GERMANTOWN."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

CONTACT PERSONS FOR DISTRICT #3 (MONTGOMERY COUNTY)
ARE AS FOLLOWS:

MS. ANYESHA MOOKHERJEE
ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: (301)513-7318

MR. VERNON STINNETT
ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: (301)513-7304

MR. VICTOR GRAFTON
UTILITY ENGINEER
PHONE: (301)513-7350

MR. KEITH LORD
MONTGOMERY COUNTY SIGNAL SHOP
PHONE: (301)674-8965

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY	CODE	DESCRIPTION	UNIT	QUANTITY
N.	203030	TEST PIT EXCAVATION	CY	2
	585621	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	2370
	585625	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	170
	585700	REMOVAL OF EXISTING PAVEMENT MARKING LINES, ANY WIDTH	LF	2720
	800000	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS	EA	8
	800000	REMOVE AND DISPOSE OF EXISTING TRAFFIC SIGNAL EQUIPMENT	LS	1
	800000	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION	EA	1
	800000	IP BASED VIDEO DETECTION CAMERA AND CABLE	EA	6
	801004	CONCRETE FOR SIGNAL FOUNDATION	CY	6
	802145	ADJUST EXISTING HANDHOLE	EA	2
NAL	802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	155
	805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	145
	811002	REMOVE ELECTRICAL HANDHOLE	EA	1
	813015	INSTALL OVERHEAD SIGN	SF	101
	818004	10 FOOT BREAKAWAY PEDESTAL POLE	EA	8
	837001	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X FT. LENGTH	EA	5
	860284	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	42
	860292	CUT,CLEAN,GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE	EA	7
	861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	2170
	861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	1100
	861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	820

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND RETURNED TO SHA.

ALL MATERIALS AND EQUIPMENT REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ALL VIDEO DETECTION CAMERAS REMOVED BY THE CONTRACTOR SHALL BE RETURNED TO 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. CONTACT ED RODENHEIZER TO COORDINATE.

CONTACT PERSONS FOR OOTS
ARE AS FOLLOWS:

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
DIVISION
PHONE: (410)787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF
TRAFFIC OPERATIONS
(410)787-7630

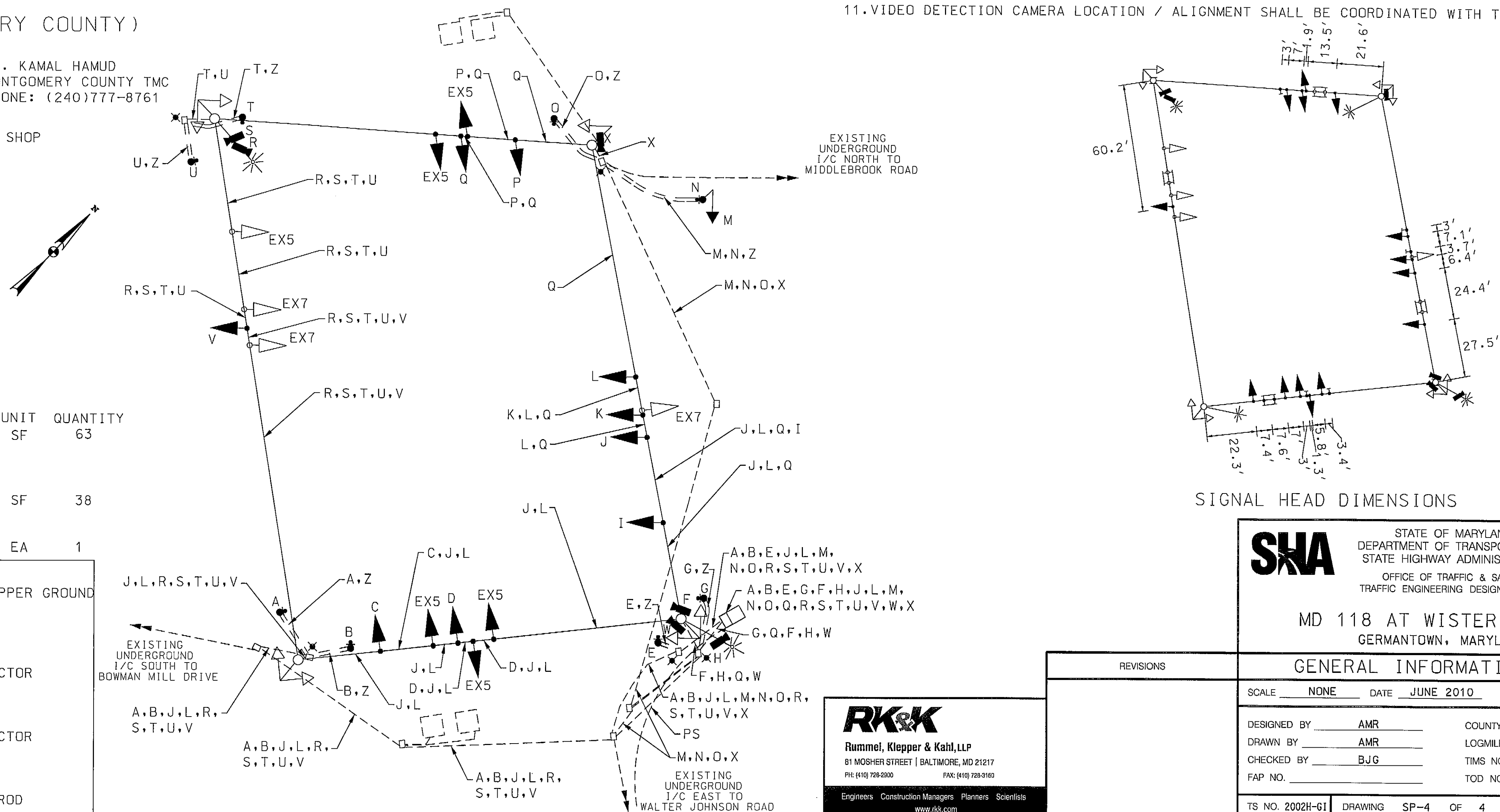
MR. ED RODENHEIZER
CHIEF, SIGNAL OPERATIONS
(410)787-7650

MR. EUGENE BAILEY
CHIEF, SIGN OPERATIONS
(410)787-7676

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
900000	SHEET ALUMINUM SIGNS - MAST ARM/POLE MOUNT 2 - M1-5(6) (48"X72") 2 - M1-5(6) (30"X36")	SF	63
900000	SHEET ALUMINUM SIGNS - SPAN MOUNT 5 - R3-5 (30"X36")	SF	38
900000	IP-BASED VIDEO DETECTION INTERFACE EQUIPMENT:5-8 CAMERAS	EA	1

A,B,E,G, O,N,T,U	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	Z	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
C,D,I,J, K,M,P,Q	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	PS	POWER SOURCE
L,V	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	EX5	EXISTING 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
F,H,R, S,W,X	VIDEO DETECTION CAMERA CABLE 3 - CONDUCTOR (NO. 18 AWG) INCIDENTAL TO CAMERA	EX7	EXISTING 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
		✕	PROPOSED GROUND ROD



GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE.
3. ALL UNUSED CABLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
4. UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
5. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK GRADE.
6. ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE MONTGOMERY COUNTY SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. KEITH LORD AT 301-674-8965 TO COORDINATE.
7. LOCATION OF ACCESSIBLE PEDESTRIAN PUSHBUTTONS MUST MEET THE LOCATION REQUIREMENTS OF THE MUTCD, SECTION 4E-09 AND FIGURE 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNAL: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
8. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM 60"x60" LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
9. PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE
LEVEL LANDING AREA, DOES NOT HAVE TO REACH MORE THAN 18".
10. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
11. VIDEO DETECTION CAMERA LOCATION / ALIGNMENT SHALL BE COORDINATED WITH THE SHA ENGINEER.

SIGNAL HEAD DIMENSIONS



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 118 AT WISTERIA DRIVE
GERMANTOWN, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE JUNE 2010 CONTRACT NO. MO5215187

DESIGNED BY AMR COUNTY MONTGOMERY

DRAWN BY AMR LOGMILE 15011805.22

CHECKED BY BJG TMS NO. K301

FAP NO. _____ TOD NO. _____

TS NO. 2002H-CI	DRAWING	SP-4	OF	4	SHEET NO.	23	OF	35
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RK&K

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PLOTTED: Tuesday, January 11, 2011 AT 09:04 AM
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